

The subsidence has been so gradual that the marsh grasses have grown uninterruptedly, till in places the roots and dead stalks can be followed from the growing grasses above high tide level to a depth far below the lowest ranges of the tide. The history of the marshes is discussed, their encroachment on fresh water swamps, their change due to bars forming between them and the sea, their burial under dunes, their destruction by changing currents and their reclamation by man. In addition to the definite evidence of slow post-glacial subsidence there is in places fictitious evidence of very recent subsidence, as in the case of drowned forests. It is shown that in many of these cases the forests developed at the edges of swamps and were destroyed by the natural or artificial opening of bars allowing the sea to enter and causing the formation of marshes. When marshes are drained or covered by drifting sand the peat level becomes considerably lower by drying and compression. Very interesting accounts are given of individual marshes along the Long Island and New England coast and especially of those of the Fundian region. In this latter there is found in one place a forest of stumps, with blackened rootstocks of ferns between, exposed on the side of the bay where it is covered at high tide by thirty feet of water. Apparently these stumps extend under the surface of the neighboring marsh. Though thousands of years old, the forest was composed of the same species that cover the near-by ridges today:—spruce, hemlock, birch, alder, ash, elm and other trees.

The book is interestingly written, well illustrated with maps, diagrams and photographs, printed on good paper and well bound in cloth. With each chapter there are extended references to the literature on the subject. While the chief interest will be for physiographers, there is much which the botanist will find of value.

GEORGE T. HASTINGS.

A LIST OF THE PLANTS OF EL SALVADOR.*

The flora of El Salvador, the smallest of American republics, has until recently been as little known as that of any Central

* Paul C. Standley and Salvador Calderón, *Lista Preliminar de las Plantas de El Salvador*. 8°, pp. 174, n. d. (published 14 Feb. 1925). Tipografía La Unión, San Salvador, El Salvador.

American country. Specimens in herbaria from El Salvador were very few, and the only list of the plants was the very imperfect "Flora Salvadoreña" of Dr. J. Samuel Ortiz. The collections made in El Salvador in 1921-2 by Mr. Paul C. Standley of the U. S. National Museum, together with extensive collections made then and subsequently by Dr. Salvador Calderón, co-author of the work under consideration, and other local botanists, have made possible the preparation of this Preliminary List of the Plants of El Salvador, which is the first approximately complete flora of any Central American country to be published. The introduction gives an account of collections made in El Salvador, of vernacular names (in which the Nahuatl element is especially noteworthy), of the affinities of the Salvador flora, and of persons who assisted in the collection of material for the work. The list proper, containing some 2070 species, is arranged in systematic order by families, the genera and species being listed alphabetically. Under each species are given the vernacular names (1500 of these are recorded altogether), the localities where collected, notes on economic uses, these sometimes of considerable length, and often (always in the case of trees or shrubs) a brief note of the color of the flowers or the habit. The bulk of the list consists of flowering plants and ferns, but the fungi, lichens, hepatics, and mosses so far known are included, although this part of the work is necessarily very incomplete. Cultivated plants are included, and distinguished by an asterisk. The proof reading of the list has been carefully done, and its appearance is a credit alike to the authors and to the printers.

The identifications have been made principally by Mr. Standley, with the assistance of specialists in various families. A considerable number of species discovered by the authors or their correspondents are indicated as new, without characterization. A few of these are *nomina nuda*, but nearly all those to which the name of Mr. Standley is attached were described by him in a series of papers in the *Journal of the Washington Academy of Sciences* in 1923 and 1924. The new combinations published in this work appear to be the following (all by Mr. Standley):

Ananas magdalenae (André) (p. 45), *Athyrocarpus rufipes* (Seub.) (p. 47), *Dichorisanthra hexandra* (Aubl.) (p. 48), *Sabadilla officinalis* (S. & C.) (p. 49), *Taetsia fruticosa* var. *ferrea* (Baker)

(p. 50), *T. stricta* (Endl.), *Struthanthus oerstedii* (Oliver) (p. 72), *Sapranthus nicaraguensis* (Seem.) (p. 84), *Zornia diphylla* var. *sericea* (Moric.) (p. 119), *Hybanthus brevis* (Dowell) (p. 152), *H. riparius* (H.B.K.), *Parsonsia balsamona* (C. & S.) (p. 159), *Ardisia paschalis* (Donn. Sm.) (p. 168), *Nymphoides humboldtianum* (H. B. K.) (p. 172), *Vincetoxicum salvinii* (Hemsl.) (p. 178), *Godmania aesculifolia* (H. B. K.) (p. 200), *Coleosanthus paniculatus* (Mill.) (p. 219).

S. F. BLAKE.

PROCEEDINGS OF THE CLUB.

MEETING OF MARCH 28, 1925

This meeting was held at the Museum Building of the New York Botanical Garden. Dr. R. A. Harper was appointed temporary chairman.

Miss Catharine Dutcher, Apt. 53, 417 W. 118th St., New York, N. Y., was elected to membership in the Club.

The following resignations were accepted by vote of the Club: Mr. G. E. Orphal, 570 Smith Street, Brooklyn, N. Y., Miss E. F. Andrews, 419 East First St., Rome, Georgia.

The Secretary reported that the name of Professor A. D. Selby, a member of the Club of long standing, was unfortunately omitted in the necrology for 1924. Professor Selby was at one time president of the American Phytopathological Society and for nearly 30 years botanist of the Ohio Experiment Station. He died May 7, 1924.

By vote of the Club the treasurer was authorized to reimburse Dr. G. H. Shull for his traveling expenses incurred incident to his lecture March 10, 1925.

Dr. Harper, speaking of the loss by resignation during the past year of two members who served terms as officers of the Club for considerable periods, suggested tentatively the advisability of amending the constitution to the effect that those holding responsible office 3, 4, or 5 years (the length of tenure to be decided) should automatically, in case they move out of town become life members and become exempt from dues.

The scientific part of the program consisted of a talk by Dr. Susan P. Nichols, of Oberlin College, entitled "Some reactions